

services in the 1950s. It is past time for those long-known principles of public health to be applied to injuries to Native and all Americans.

Leon S. Robertson, PhD, Nanlee Research, Branford, CT.

References

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Sugarman, et al., Respond

We appreciate the opportunity that Dr. Robertson's letter gives us to remind readers that environmental factors, as well as behavioral risks, are important determinants of injury rates among all Americans, not just American Indians and Alaska Natives. However, our article did not attempt to define the relative contributions of behavioral and environmental factors to injury. Rather, we described self-reported behavioral risk factors related to the health status of American Indians and Alaska Natives, how the prevalence of these factors varied by region, and how the self-reported prevalence compared to the Year 2000 objectives.

Dr. Robertson is incorrect in stating that "injury related to environmental factors is the leading cause of deaths of Native Americans." In fact, diseases of the heart account for more deaths than injuries among American Indians and Alaska Natives, and malignant neoplasms account for more deaths than injuries among American Indian and Alaska Native women (1). Diabetes mellitus, chronic liver disease and cirrhosis, and cerebrovascular disease also appear in the 10 leading causes of deaths for American Indians and Alaska Natives. Most public health practitioners believe that these important health conditions are, at least in part, associated with behavioral risks. Injury is an extremely important problem among American Indians and Alaska Natives, but it is not the only problem. In addition, although all injuries are related to environmental factors in some way, the relative contributions of adverse environmental exposures

and behavioral risks to injury deaths among American Indians and Alaska Natives have not been well established.

Robertson asserts that attribution of injuries to behavior is "victim-blaming." Elsewhere, he has stated that "alcohol contributes to injury by sometimes affecting behavior that places people at greater risk of injurious energy exposure as well as perhaps increasing vulnerability of tissues to injury insults" (2a). Robertson neglects to mention that in the study of porch step falls which he cites, 55 percent of falls (and 100 percent of those at night) were associated with alcohol use (3). We vigorously condemn "victim-blaming" with regard to the adverse health status of American Indians and Alaska Natives, but we strongly disagree that the study of behavioral risk factors is not worthy of attention.

We agree that it is likely that self-reports underestimate the prevalence of certain risk factors, although we do not accept Robertson's blanket assertion that "behavioral surveys have been shown to be invalid." In any case, a major point of our article—that the prevalence of risk factors such as seat belt nonuse and heavy drinking needs to be reduced—becomes more compelling if the already high reported prevalence of these factors is actually underestimated. Robertson has asserted that resources used for behavioral risk factor surveillance should be directed elsewhere (2b,4). We feel that the relatively modest resources used to maintain behavioral risk surveillance are wise expenditures to the extent that the results are used to focus intervention strategies and to secure the resources needed to implement these strategies. The Behavioral Risk Factor Surveillance System is an important (even if imperfect) survey of information about the behavioral risk factors of Americans. As to the charge that reporting the results of behavioral risk factor surveys among American Indians and Alaska Natives is "outrageous," we believe that most thoughtful readers of the paper will conclude otherwise.

Jonathan R. Sugarman, MD, MPH, Indian Health Service Epidemiology Program, Seattle, WA, Charles W. Warren, PhD, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control, Atlanta, GA, Linda Oge, Billings Area Office, Indian Health Service, Billings, MT, and Steven D. Helgersen, MD, MPH, Health Care Financing Administration, Region X, Seattle.

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